

## ILLUMINATION DEVICE

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### ABSTRACT

Illumination devices comprising a light source and a light fiber are reported. The light fiber is optically coupled to the light source such that at least a portion of the light emitted from the light source impinges on the input end of the light fiber.

10 The light fiber comprises an elongate polymeric core having an input end for receiving light from a light source, an output end for emitting light transmitted through the core, and a lateral surface extending along a longitudinal axis of the core between the input end and the output end. The light fiber includes a light-emitting region including at least one optical element that directs light traveling through the

15 light fiber out of at least a portion the lateral surface of the light fiber in a direction generally transverse to the longitudinal axis. A continuous outer cladding layer comprising a polymeric material having a lower index of refraction than the core extends over the lateral surface of the core and the optical elements.

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